

Department of Permitting Services



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REQUIREMENTS FOR THE SUBMITTAL OF NFPA 14 STANDPIPE SYSTEMS (ePlans)

Effective: June 1, 2016

Supersedes: October 1, 2014

A. PERMIT PROCEDURES

- 1. Apply Online (ePermits) and ePlans (ProjectDox) accounts will need to be established prior to permit application and/or submittal. You can register for these by emailing dps.eservices@montgomerycountymd.gov or by calling 240-777-0311. Once your accounts are created you can apply for permits and upload plans using ePermits, also known as Apply Online.
- 2. A complete permit application is required to be included with all submissions. Where standpipe installation is part of a sprinkler installation please refer to the NFPA 13, NFPA 14 and NFPA 20 combined fire protection submittal requirements document found under ePlans submittal requirements for fire protection systems.
- 3. Permit application fees are due at the time of submission.
- 4. Permit applications shall conform to all applicable codes and standards enforced by the State of Maryland and Montgomery County.
- 5. For projects located within the City of Gaithersburg, contact their Fire Marshal by calling 301-258-6330.
- 6. For projects located within the City of Rockville, contact their Fire Marshal by calling 240-314-8240.

B. GENERAL SUBMITTAL REQUIREMENTS

- 1. Plans submitted shall comply with the general requirements for fire protection plans as noted here and in the general submittal requirements of the fire protection permit ePlans submittal requirements webpage.
- 2. You must provide one copy of the calculations (as applicable). Each calculated area shall be submitted as a separate file into the documents folder of ePlans.
- 3. Catalog cuts sheets are required for all equipment provided with the standpipe. The fire information shall be combined into a pdf and uploaded into the documents folder of ePlans.
- 4. Each drawing shall be submitted as a separate file into the drawings folder of ePlans.

- 5. Each calculations shall be submitted as a separate file in the documents folder of ePlans. A list shall also be provided showing the file number, area/floor and the drawing number when more than 5 calculation files are submitted.
- 6. All plans submitted shall contain the sprinkler contractor's Maryland State and Montgomery County sprinkler contractor license numbers as well as the associated building permit number.
- All information shall be consistent throughout, reflective of intended field conditions and conform to <u>NFPA 14</u> as amended by the <u>Montgomery County Executive</u> <u>Regulations.</u>

C. INFORMATION REQUIRED ON DRAWINGS

- 1. All information required by NFPA 14 Section 8.1.2 shall be on plans.
- 2. The building permit number shall be on the plans.
- 3. The minimum acceptable scale of plans shall be 1/8"-1'. Smaller areas and/or details shall be shown in 1/4"-1' scale.
- 4. A floor elevation and building section elevation (in relation to sea level) shall be provided on plans. This information shall correspond to gradient information.
- 5. All parking spaces shall be shown on the plans in garages. Hose valves in garages shall not be obstructed by parking.

D. SITE PLAN / WATER INFORMATION

- 1. Provide an approved <u>WSSC</u> site plan for new water service.
- 2. Provide a hydraulic information sheet. (located on WSSC approved site plan)
- 3. For existing water service provide a flow test inside the building due to the unknown condition of the underground pipe. DPS does not need to witness this test. It must be no older than 1 year. You must adjust for low gradient as above and submit a copy of the test results with the submittal.

E. STANDPIPE/EQUIPMENT INFORMATION

- 1. Standpipes shall be automatic wet type.
- 2. Standpipes in unheated areas must be automatic dry type.
- 3. Standpipe systems in detached open parking garages may be of the manual dry type provided the piping is air supervised for breaks and/or open valves.
- 4. Occupant use hose is prohibited in both new and existing buildings
- 5. New standpipe systems shall be Class I only.
- 6. Each fire hose valve must have a 2 ½" to 1 ½" reducer, cap and chain.
- 7. Fire department connection (FDC) must be location within 100' of a fire hydrant, and between 18 and 48" above finished grade level to the centerline of the inlets.
- 8. Number of $2\frac{1}{2}$ " inlets required for FDC shall be as follows:

System Demand (GPM)	No. of Inlets:
Up to 749	2
750-999	3
1000 and above	$\it \Delta$

- 9. Multiple connections for the same building shall be interconnected.
- 10. When a section of the building is fed by a connection (e.g. partial systems) permanent

- all weather identification signs must be provided on connections.
- 11. The FDC must be sized at least as large as the main sprinkler system riser or the fire pump discharge line, whichever is larger.
- 12. Any heat trace or similar equipment shall be listed for fire protection service and shall be electrically supervised by the fire alarm system.

F. <u>DESIGN/CALCULATION INFORMATION</u>

- 1. Travel distance measurements shall be parallel or at right angles to walls.
- 2. Supplemental hose valves outside of the stairs shall not be located within tenant spaces unless hose reach requirements cannot be met by placement of valves in public corridors or by use of wall hydrants for spaces opening to the exterior. Hose valve locations must be marked by the placement of signs, the striping of columns, or other approved methods.
- 3. The follow exceptions, as noted in the <u>Montgomery County Executive Regulations</u> shall apply amending Paragraph 7.8.1 of NFPA 14:
 - a. Exception 1: In high rise buildings, where booster pumps are necessary to produce the required residual pressures, pumps and piping systems must be sized to provide for the demand of the hydraulically most remote hose station, or the sprinkler system demand, whichever is greater. The standpipe system must also be sized to provide the required flow and pressure for all hose stations required to be flowing, when supplied by 150 psi at 1000 gpm at the FDC(s). Two sets of calculations will therefore be required under this exception.
 - b. Exception 2: Systems in buildings that are not high-rise, and dry systems with no automatic water supply, may be sized to obtain the required flows and pressures, when supplied by 150 psi at 1000 gpm at the FDC(s).
 - c. Exception 3: In existing buildings, after shell occupancy, hose valves added to correct hose reach violations created by tenant modifications may be supplied by 3" pipe without recalculation.